

Abstract of the Disclosure

A system for monitoring the conditions within the fuel storage compartments of a transport tank comprises an overfill pressure vacuum probe installed in each fuel storage compartment and which has a first sensor for detecting the presence of fuel at a predetermined level in the compartment, and a second sensor for detecting the pressure of a gaseous head above the fuel. A signal generator responsive to said first and second sensors produces a first signal representing a normal condition when the first sensor is not detecting fuel in the compartment at the predetermined level, a second signal when the second sensor detects a predetermined high pressure of the gaseous head, and a third signal when the second sensor detects a predetermined low pressure of the gaseous head. An output control responsive to the signals delivers as output the first signal when the second and third signals are not present, and delivers as output the second signal when the second signal is received or delivers the third signal when the third signal is received. A retain/overfill monitor is responsive to the output control and, when the first signal is received therefrom, delivers a permit signal to enable transfer of fuel to or from the transport tank. Output of the permit signal ceases in response to either the second signal or the third signal, thereby precluding delivery of fuel whenever either a predetermined high or low pressure condition is present.